```
<!--1.alertmessage.html-->
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>
    <title>
      alert message
    </title>
  </head>
  <body>
    <p>
      Javascript.
    </p>
    <script type="text/javascript"
src="js/code.js"></script>
  </body>

</html>

//File: code.js in the js folder
window.alert("Welcome to Javascript!");
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>
      buttons
    </title>
  </head>
  <body>
    <p>
      Javascript.
    </p>
    <button onclick="alert('How can I help you?')">
      Click me.
    </button>
    <button id="button2">
      Click me.
    </button>
    <script>

document.getElementById("button2").onclick=function(){
        alert("You have just clicked me!");

      }
    </script>
  </body>
```

```
</html>
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset ="utf-8">
    <title>
      change html content
    </title>
    <style>
      .bluebox{
        background-color: #3A5795;
        color: white;
        height: 100px;
        width:auto;
      }
      .yellowbox{
        background-color: rgb(222, 224, 85);
        height: 100px;
        width: auto;
      }
      .greenbox{
        background-color: #31af37;
        height: 100px;
        width: auto;
      }
      .great{
        background-color: #5a3479;
```

```
      }
    </style>
  </head>

  <body>
    <div class="bluebox" id="facebook">
      <p>
        Facebook is
        <span class="great">
          great
        </span>
        .
      </p>

    </div>
    <div class="yellowbox" id="apple">
      <p>
        Apple.
      </p>

    </div>
    <div class="greenbox">
      <p>
        Microsoft.
      </p>

    </div>
    <button id="button1">
      Change facebook content.
    </button>
    <button id="button2">
      Change apple content.
    </button>
    <script>
      document.getElementById("button1").onclick =
function(){
        document.getElementById("facebook").innerHTML =
"<p>Facebook.</p>";

      }
```

```
        document.getElementById("button2").ondblclick =
function(){
          document.getElementById("apple").innerHTML =
"<ul><li>Audi</li><li>BMW</li><li>Mercedes</li></ul>";

        }
    </script>
  </body>


</html>
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset ="utf-8">
    <title>
      change html style
    </title>
    <style>
      .bluebox{
        background-color: #3A5795;
        color: white;
        height: 100px;
        width:auto;
      }
      .yellowbox{
        background-color: rgb(222, 224, 85);
        height: 100px;
        width: auto;
      }
      .greenbox{
        background-color: #31af37;
        height: 100px;
        width: auto;
      }
      .great{
        background-color: #5a3479;
```

```
      }
    </style>
  </head>

  <body>
    <div class="bluebox" id="facebook">
      <p>
        Facebook is
        <span class="great">
          great
        </span>
        .
      </p>

    </div>
    <div class="yellowbox" id="apple">
      <p>
        Apple.
      </p>

    </div>
    <div class="greenbox">
      <p>
        Microsoft.
      </p>

    </div>
    <button id="button1">
      Change facebook style.
    </button>
    <button id="button2">
      Change apple style.
    </button>
    <script>
      document.getElementById("button1").onclick =
function(){
        document.getElementById("facebook").style.width =
'200px';

document.getElementById("facebook").style.backgroundColor
= 'rgba( 26, 203, 135, 0.1 )';
```

```
      }
        document.getElementById("button2").ondblclick =
function(){

document.getElementById("apple").style.fontFamily =
'monospace';
          document.getElementById("apple").style.fontSize
= '3em';
        }
    </script>
  </body>

</html>
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset ="utf-8">
    <title>
      variables and date types
    </title>
    <style>
      .bluebox{
        background-color: #3A5795;
        color: white;
        height: 100px;
        width:auto;
      }
      .yellowbox{
        background-color: rgb(222, 224, 85);
        height: 100px;
        width: auto;
      }
      .greenbox{
        background-color: #31af37;
        height: 100px;
        width: auto;
      }
      .great{
        background-color: #5a3479;
```

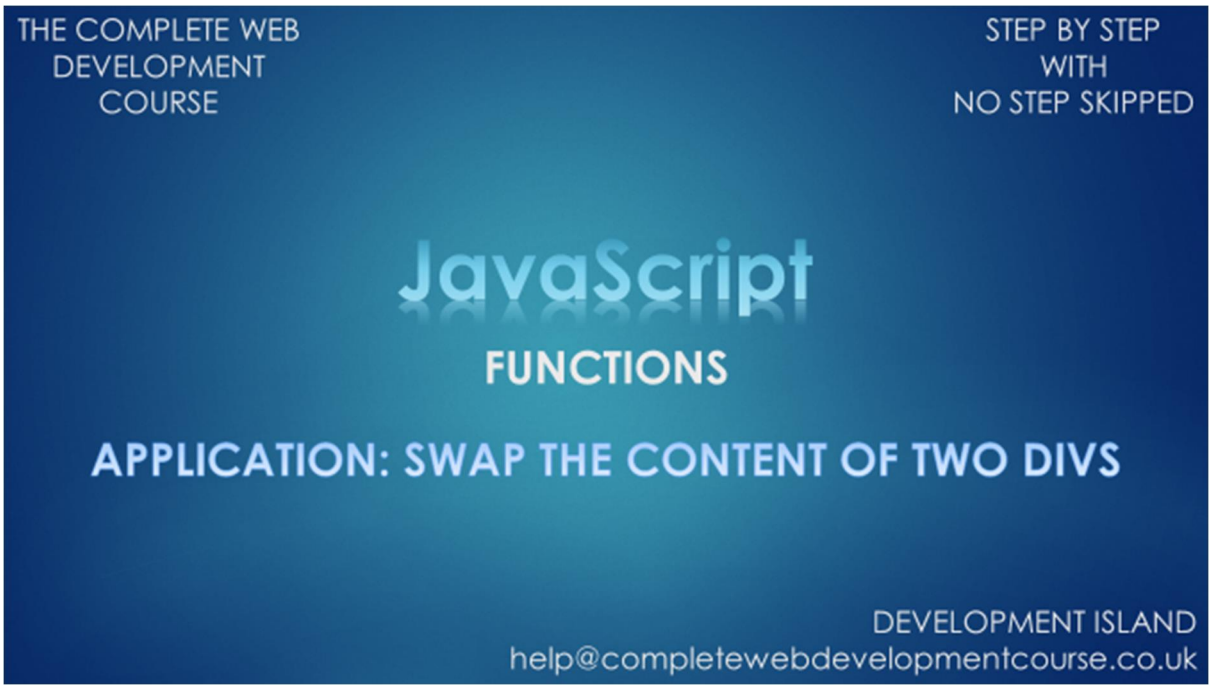
```
    }
  </style>
</head>

<body>
  <div class="bluebox" id="facebook">
    <p>
      Facebook is
      <span class="great">
        great
      </span>
      .
    </p>

  </div>
  <div class="yellowbox" id="apple">
    <p>
      Apple.
    </p>

  </div>
  <div class="greenbox">
    <p>
      Microsoft.
    </p>

  </div>
  <button id="button1">
    Change facebook style.
  </button>
  <button id="button2">
    Change apple style.
  </button>
  <script>
    var x = 3;
    window.console.log(x);
    var y;
    y = 5;
    var z;
    window.console.log("the value of z is " + z);
    z = x + y;
```

```
      window.console.log("the value of z is " + z);
      window.console.log("the type of z is: " +
typeof(z));
      z = x + " " + y;
      window.console.log("the value of z is " + z);
      window.console.log("the type of z is " + typeof(z));
      var greeting = "Hello";
      var firstname = "John";
      var message = greeting + " " + firstname;
      window.console.log("the value of message is: " +
message);
      window.console.log("the type of message is: " +
typeof(message));
      var check = (x == 5);
      window.console.log("the value of check is: " +
check);
      window.console.log("the type of check is: " +
typeof(check));
      var myArray = [1,2,3];
      window.console.log(myArray);
      window.console.log(typeof(myArray));
    </script>
  </body>

</html>
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset ="utf-8">
    <title>
      change html using variables
    </title>
    <style>
      .bluebox{
        background-color: #3A5795;
        color: white;
        height: 100px;
        width:auto;
      }
      .yellowbox{
        background-color: rgb(222, 224, 85);
        height: 100px;
        width: auto;
      }
      .greenbox{
        background-color: #31af37;
        height: 100px;
        width: auto;
      }
      .great{
        background-color: #5a3479;
```

```
      }
    </style>
  </head>

  <body>
    <div class="bluebox" id="facebook">
      <p>
        Facebook is
        <span class="great">
          great
        </span>
        .
      </p>

    </div>
    <div class="yellowbox" id="apple">
      <p>
        Apple.
      </p>

    </div>
    <div class="greenbox">
      <p>
        Microsoft.
      </p>

    </div>
    <button id="button1">
      Change facebook style.
    </button>
    <button id="button2">
      Change apple style.
    </button>
    <script>
      var color = 'rgb(18, 149, 68)';
      document.getElementById("button1").onclick =
function(){

document.getElementById("facebook").style.backgroundColor
= color;
```

```
      }
        var x, y, z, appleColor;
      document.getElementById("button2").onclick =
function(){
        x = Math.round(Math.random()*256);

        y = Math.round(Math.random()*256);

        z = Math.round(Math.random()*256);
        appleColor = 'rgb(' + x + ', ' + y + ', ' + z +
')';

document.getElementById("apple").style.backgroundColor =
appleColor;
        document.getElementById("apple").innerHTML = '<p>'
+ appleColor + '</p>';
      }
    </script>
  </body>

</html>
```




```
<!DOCTYPE html>
<html>
  <head>
    <meta charset ="utf-8">
    <title>
      functions
    </title>
    <style>
      .bluebox{
        background-color: #3A5795;
        color: white;
        height: 100px;
        width:auto;
      }
      .yellowbox{
        background-color: rgb(222, 224, 85);
        height: 100px;
        width: auto;
      }
      .greenbox{
        background-color: #31af37;
        height: 100px;
        width: auto;
      }
      .great{
        background-color: #5a3479;
```

```
      }
    </style>
  </head>

  <body>
    <div class="bluebox" id="facebook">
      <p>
        Facebook is
        <span class="great">
          great
        </span>
        .
      </p>

    </div>
    <div class="yellowbox" id="apple">
      <p>
        Apple.
      </p>

    </div>
    <div class="greenbox" id="microsoft">
      <p>
        Microsoft.
      </p>

    </div>
    <button id="button1"
onclick="swap('facebook','apple')">
      Swap content of facebook and apple.
    </button>
    <button id="button2"
onclick="swap('apple','microsoft')">
      Swap content of apple and microsoft.
    </button>
    <script>
      function greeting1(){
        window.alert('Hello!');

      }
      //greeting1();
```

```
      function greeting2(firstname){
        window.alert('Hello ' + firstname + '!');
      }
      //greeting2('Mike');

      function sum(a,b){
        return a+b;

      }
      var x = sum(3,7);
      //window.alert(x);

      function swap(id1,id2){
        var y =document.getElementById(id1).innerHTML;

        var z =document.getElementById(id2).innerHTML;

        document.getElementById(id2).innerHTML = y;
        document.getElementById(id1).innerHTML = z;
      }
    </script>
  </body>

</html>
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>
      objects
    </title>
  </head>
  <body>
    <p>
      Javascript.
    </p>
    <script>
      var myPhone = {
        make : "Apple" ,
        model : "Iphone 4",
        warranty : 12,
        color : "white"
      }
          ;
      window.console.log(myPhone);
      delete myPhone.warranty;
      window.console.log(myPhone);
      window.console.log(myPhone.model);
      var myOtherPhone = myPhone;
      window.console.log(myOtherPhone);
```

```
      myOtherPhone.model = "Iphone 5";
      window.console.log(myOtherPhone);
      window.console.log(myPhone);
    </script>
  </body>

</html>
```

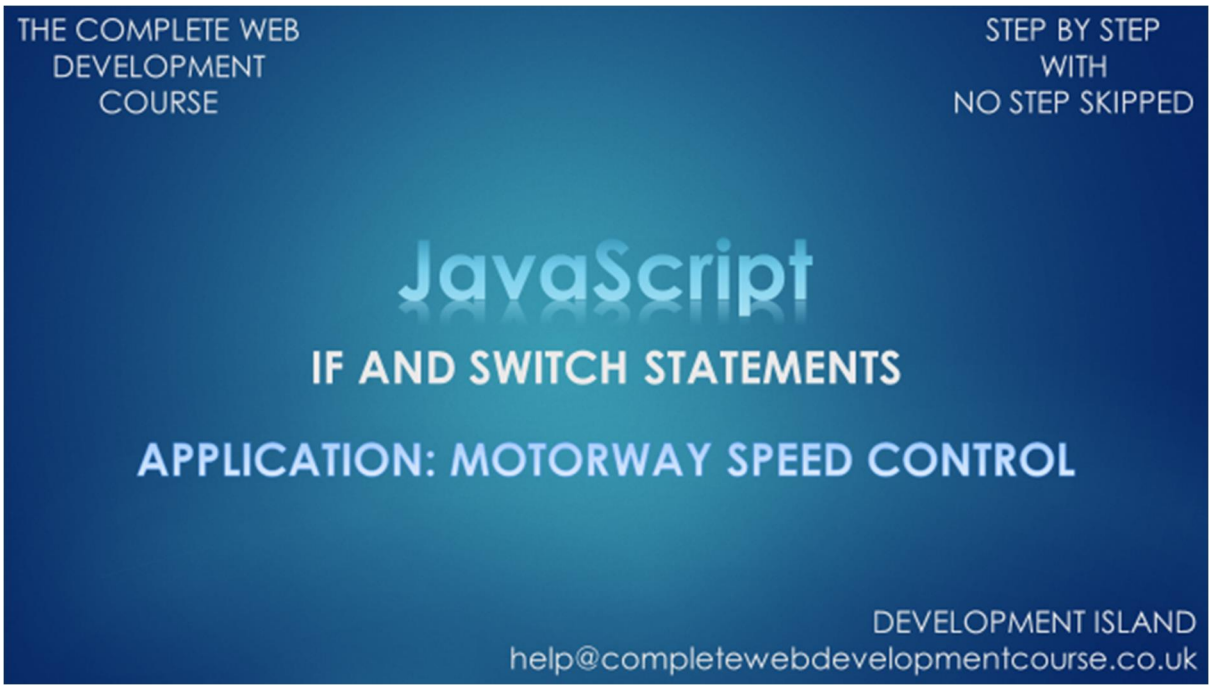
```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>
      objects using new
    </title>
  </head>
  <body>
    <p>
      Javascript.
    </p>
    <script>
      var myPhone = new Object();
      myPhone.make = "Samsung";
      myPhone.model = "Galaxy S4";
      myPhone.warranty = 12;
      myPhone.color = "black";
      window.console.log(myPhone);
      myPhone.warranty = 0;
      window.console.log(myPhone);
    </script>
  </body>

</html>
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>
      object constructors
    </title>
  </head>
  <body>
    <p>
      Javascript.
    </p>
    <script>
      function phone(make, model, warranty, color){
        this.make = make;
  this.model = model;
  this.warranty = warranty;
  this.color = color;
  this.extendWarranty = function (x) {
    this.warranty += x;

  }
}

  var myPhone = new phone("Apple", "Iphone 5", 12,
"white");
```

```
  window.console.log(myPhone);
  myPhone.extendWarranty(12);
  window.console.log(myPhone.warranty);

  myPhone.condition = "like new";
  window.console.log(myPhone);
  window.console.log(myPhone.condition);

  var myBrothersPhone = new phone("Apple", "Iphone 4", 6,
"black");
  window.console.log(myBrothersPhone);
  window.console.log(myBrothersPhone.condition);
  phone.prototype.condition = "new";
  window.console.log(myBrothersPhone.condition);
  window.console.log(myPhone.condition);
  </script>
  </body>

</html>
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>
      arrays
    </title>
  </head>
  <body>
    <p id="myParagraph">
      Javascript.
    </p>
    <script>
      var shoppingList = ["bread", "eggs", "milk"];
      //var shoppingList = new Array("bread", "eggs",
"milk");
      showResult(shoppingList);
      showResult(shoppingList[0]);
      showResult(shoppingList[2]);
      function showResult(x){
        document.getElementById("myParagraph").innerHTML
+= "<br />" + x;
      }
      shoppingList[1] = "yogurt";
      showResult(shoppingList);
      shoppingList[2] = "orange";
```

```
      showResult(shoppingList);
      delete shoppingList[1];
      showResult(shoppingList);
      shoppingList[1] = "yogurt";
      showResult(shoppingList);
      shoppingList.splice(1,1);
      showResult(shoppingList);
      shoppingList.splice(1,0,"banana", "apple");
      showResult(shoppingList);
      shoppingList.sort();
      showResult(shoppingList);
      shoppingList.reverse();
      showResult(shoppingList);
      var myString = 'what is weather like?';
      var myArray = myString.split(' ',2);
      showResult(myArray);
    </script>
  </body>
</html>
```




```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>
      if and switch
    </title>
  </head>
  <body>
    <p>
      Speed on the motorway:
      <input id="speed" type="number"/>
      <button onclick="checkSpeed()">
        Check
      </button>
    </p>
    <p>
      Your season now:
      <input id="myInput"/>
      <button onclick="checkSeason()">
        Submit
      </button>
    </p>
    <script>
      function checkSpeed(){
```

```
        var speed =
document.getElementById("speed").value;
        if (speed>70){
          window.alert("You are going too fast!");

        }
        else if(speed<40){
          window.alert("You are going too slow!");

        }
        else{
          window.alert("Your speed is fine");

        }

      }

      function checkSeason(){
        var x =
document.getElementById("myInput").value.toLowerCase();
        switch(x){
          case "summer":
            window.alert("It is summer time!");
            break;
          case "winter":
            window.alert("It is winter time!");
            break;
          case "spring":
            window.alert("It is spring time!");
            break;
          case "autumn":
            window.alert("It is autumn time!");
            break;
          default:
            window.alert("I do not recognise this");
        }
      }

    </script>
  </body>
</html>
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>
      loop for
    </title>
  </head>
  <body>
    <p id="myParagraph">
      Javascript.
    </p>
    <script>
      for(i=0; i<5; i++){
        document.getElementById("myParagraph").innerHTML
+= "<br />" + i;

      }
      for(i=7; i>0; i--){
        document.getElementById("myParagraph").innerHTML
+= "<br />" + Math.pow(i,2);

      }

      var shoppingList = ["bread", "milk", "eggs"];
      for(i=0; i<shoppingList.length; i++){
```

```
        document.getElementById("myParagraph").innerHTML
+= "<br />" + shoppingList[i];

      }
      var numberList = [1, 2, 3];
      for(i=0; i<numberList.length; i++){
        numberList[i] += 10;

      }
      document.getElementById("myParagraph").innerHTML +=
"<br />" + numberList;
    </script>
  </body>
</html>
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>
      while loop
    </title>
  </head>
  <body>
    <p id="myParagraph">
      Javascript.
    </p>
    <button onclick="initiateGame()">
      Start
    </button>
    <div id="balance">
      Current Balance: $1000
    </div>
    <script>
      var i = 0;
      while(i<5){
        document.getElementById("myParagraph").innerHTML
+= "<br />" + i;
        i++;
      }
      function initiateGame(){
```

```
        var balance = 1000;
        var itemsBought = 0;
        while(balance>0){
          var itemPrice = Math.floor(Math.random()*100);
          if(itemPrice <= balance){
            itemsBought += 1;
            balance -= itemPrice;
            document.getElementById("balance").innerHTML
+= "<p> Purchase amount: $" + itemPrice +". New Balance:
$" + balance + ". </p>";
          }
        }
        document.getElementById("balance").innerHTML +=
"<p> You bought: " + itemsBought + " items.</p>";
      }
    </script>
  </body>
</html>
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>
      Regular Expression
    </title>
  </head>
  <body>
    <p>
      String:
      <span id="string">
      </span>
    </p>
    <p>
      Pattern:
      <span id="pattern">
      </span>
    </p>
    <p>
      Result(search):
      <span id="search">
      </span>
    </p>
    <p>
      Result(match):
```

```
      <span id="match">
      </span>
    </p>
    <p>
      Result(test):
      <span id="test">
      </span>
    </p>
    <script>
      var str = "Atlanta \n5783 75%";
      //var pattern = /[a-z]/g;
      //var pattern = /[^atn]/g;
      //var pattern = /[4-7]/g;
      //var pattern = /\d/g;
      //var pattern = /\w/g;
      //var pattern = /\W/g;
      //var pattern = /\s/g;
      //var pattern = /\d{10}/g;
      //var pattern = /^b/g;
      var pattern = /\n/g;
      //var pattern = new RegExp("a","g");
      document.getElementById("string").innerHTML = str;
      document.getElementById("pattern").innerHTML =
pattern;
      document.getElementById("search").innerHTML =
str.search(pattern);
      document.getElementById("match").innerHTML =
str.match(pattern);
      document.getElementById("test").innerHTML =
pattern.test(str);
    </script>
  </body>
</html>
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>
      errors
    </title>
    <style>
      #error{
```

```
        color: #d36363;

      }
    </style>
  </head>
  <body>
    <p>
      Your password should contain at least 6 characters,
1 number and 1 capital letter:
    </p>
    <p>
      Enter Password:
      <br />
      <input id="password" type="password">
    </p>
    <p>
      Re-enter Password:
      <br />
      <input id="password2" type="password">
    </p>
    <button onclick="check()">
      Submit
    </button>
    <p id="error">
    </p>
    <script >
      //try{
      //sum(3,4);
      //}
      //catch(err){
      //document.getElementById("error").innerHTML =
err.message;
      //}
      function check(){
        var password =
document.getElementById("password").value;

        var password2 =
document.getElementById("password2").value;
        var errorMessage =
document.getElementById("error");
        var errorTOThrow = "";
```

```
        try{

          if(password.length<6){
            errorTOThrow += "<br /> Password too short.";
          }
          if(/[A-Z]/g.test(password) == false){
            errorTOThrow += "<br /> Password should
include at least one capital letter.";
          }
          if(/\d/g.test(password) == false){
            errorTOThrow += "<br /> Password should
include at least one digit.";
          }
          if(password != password2){
            errorTOThrow += "<br /> Passwords should
match.";
          }
          throw errorTOThrow;
        }
        catch(err){
          errorMessage.innerHTML = err;
        }
      }
    </script>
  </body>

</html>
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>
      setInterval and setTimeout
    </title>
  </head>
  <body>
    <p id="counter">
      0
    </p>
    <button onclick="clearInterval(myCounter)">
      Stop counting.
    </button>
    <br />
    <button onclick="clearTimeout(delayedWelcomeMessage)">
      Avoid Welcome Message
    </button>
    <script >
      var counter = document.getElementById("counter");
      var x = 0;
      var myCounter = setInterval(function(){
        x++;
        counter.innerHTML = x},1000);
```

```
      var delayedWelcomeMessage = setTimeout(function(){
        window.alert("Welcome to our page")},3000);
    </script>
  </body>

</html>
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>
      window and screen
    </title>
    <style>
      #div1{
        background-color: #dbee5c;

      }
      #div2{
        background-color: #6dbf8c;

      }
      #div3{
        background-color: #4a80ed;

      }
      #div4{
        background-color: #d9a962;

      }
      .equalBox{
```

```
        float: left;

        margin-left: 5px;
      }
    </style>
  </head>
  <body>
    <div id="div1" class="equalBox">
      Div1
    </div>
    <div id="div2" class="equalBox">
      Div2
    </div>
    <div id="div3" class="equalBox">
      Div3
    </div>
    <div id="div4" class="equalBox">
      Div4
    </div>
    <script >
      var windowHeight = window.innerHeight ||
document.documentElement.clientHeight ||
document.body.clientHeight;
      //window.alert(windowHeight);

      var screenWidth = window.screen.width;
      //window.alert(screenWidth);

      var availableScreenHeight =
window.screen.availHeight;
      //window.alert(availableScreenHeight);

      for(i=1; i<5; i++){

        document.getElementById("div" + i).style.width =
window.innerWidth/4-10 + 'px';

        document.getElementById("div" + i).style.height =
window.innerHeight-10 + 'px';

      }
```

```
    </script>
  </body>

</html>
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>
      Alert boxes
    </title>
  </head>
  <body>
    <p id="myParagraph">
      Javascript.
    </p>
    <script >
      //window.alert("Welcome to our page!");

      var acceptCookies = window.confirm("Please confirm
you accept cookies");
      if(acceptCookies == true){
        window.alert("You confirmed you accept cookies.");

      }
      else{
        window.alert("You do not accept cookies.");

      }
```

```
      var visitor = prompt("Please enter your name.");
      window.alert("Hi " + visitor.toUpperCase() + ", we
wish you a nice exprerience on our page! Don't forget to
like us on Facebook!");
    </script>
  </body>

</html>
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>
      cookies
    </title>
  </head>
  <body>
    <p id="myParagraph">
      Javascript.
    </p>
    <script >
      window.alert(document.cookie);
    </script>
  </body>

</html>
```